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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,528	03/30/1999	ROBERT A. CORDERY	E-831	5943

919                  7590                  07/30/2003

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[REDACTED] EXAMINER

DIXON, THOMAS A

ART UNIT	PAPER NUMBER
	3629

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/280,528	CORDERY ET AL.
	Examiner Thomas A. Dixon	Art Unit 3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 April 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) \_\_\_\_\_ is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2-6, 10-13, 30, 32 is/are allowed.
- 6) Claim(s) 7, 14-24, 27, 31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) All    b) Some \* c) None of:  
         1. Certified copies of the priority documents have been received.  
         2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .  
         3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_ .

***DETAILED ACTION***

***Request for Continued Examination***

1. The request filed on 24 April 2003 for a Request for Continued Examination (RCE) based on parent Application No. 09/280,528 is acceptable and an RCE has been established. An action on the RCE follows.
2. The IDS submitted 24 April 2003 has been considered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14, 15, 16, 17, 21, 23, 24, 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per Claim 14, 15, 16, 24 the phrase "is hard" is indefinite as it is not possible to determine the meets and bounds of the phrase.

As per claims 14, 15, 16, 17, 21, 23, 24, 31 it is unclear if the phrase "group [P]" is a collection of points with or without coordinates and is therefore indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 7 is rejected under 35 U.S.C. 103(a) as being anticipated by Cordery et al (6,175,827) in view of Vanstone (6,212,281).

As per Claim 7.

Cordery et al ('827) discloses an indicium on a article, see column 9, line 63 – column 10, line 60, and figures 2-5;

a signature generated with a private key of a first party, see column 10, lines 6-8; a certificate, see column 10, lines 6-8;

information specifying attributes of said article, see column 10, lines 9-21

Cordery et al (827) is silent on the method of encryption, but states that "it should be recognized that the particular printing system and the particular verifying system is a matter of systems design choice." see column 12, lines 47-49 and "...the particular encryption algorithm employed may vary depending on the system design choice." see column 15, lines 53-55;

Vanstone ('281) teaches encrypting a message "m" using a certificate and number generator and a public key, see column 3, line 1 – column 4, line 65 for the benefit of utilizing a shorter message, see column 2 lines 50-56.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to generate a private key of said first party as a function of said certificate, said information and a private key of a certifying authority as taught by Vanstone ('281) for the benefit of utilizing a smaller message.

#### ***Prior Art made of Record***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cordery et al (6,295,359) discloses the IBIP architecture with public /private keys, certificates and random number generation, see column 2, lines 28-38 for verification of indicia.

Menezes et al teaches implicitly certified public keys, see 13.30.

Micali ('982) teaches certificate data with multiple authorities, see column 2, lines 45-54.

Takaragi et al ('349) teaches multiple digital signature, see column 1, lines 18-37.

6. From the EIC search references which teach elliptical Curve Cryptography and digital signatures, but do not disclose the invention as claimed.

USPS creation of public key infrastructure with VeriSign, Inc and GTE Corp. as certifying authorities.

Certicom teaches an Elliptical Curve engine that performs public-key encryption and digital signatures required for advanced data security.

X.509 teaches a digest encrypted with the certification authority's private key to create a digital signature.

***Allowable Subject Matter***

7. Claims 2-6, 10-13, 30 and 32 are allowable.
8. The following is an examiner's statement of reasons for allowance:

As per Claim 10.

The prior art of record, specifically Pauschinger ('704) or Cordery et al ('827) in view of Vanstone ('281) does not disclose or fairly teach said certifying authority providing said meter with an integer, said integer being a first function of said private key of said authority; and

said first function, said second function and said published related information are chosen so that a party seeking to verify said indicia can compute said digital postage meter public key by operating on said published related information with said published public key of said authority.

As per Claim 12.

The prior art of record, specifically Pauschinger ('704) or Cordery et al ('827) in view of Vanstone ('281) does not disclose or fairly teach said certifying authority providing said user with an integer, said integer being a first function of said private key of said authority; and

said first function, said second function and said published related information are chosen so that a party seeking to verify said indicia can compute said digital postage meter public key by operating on said published related information with said published public key of said authority.

As per Claim 32.

The prior art of record, specifically Pauschinger ('704) or Cordery et al ('827) in view of Vanstone ('281) does not disclose or fairly teach the method of verification of a postal indicium as claimed in step c.

The claims which depend from the above allowed claims are allowed for the same reasons.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (703) 305-4645. The examiner can normally be reached on Monday - Thursday 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 746-5529 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



Thomas A. Dixon  
Examiner  
Art Unit 3629

July 24, 2003